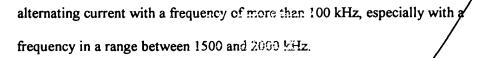
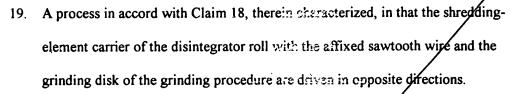
Claims

Claimed is:

- 1. A process for the production of a disintegrator roll of an open-end spinning apparatus with a shredding-element designed as a sawtooth wire, which is inlaid in a groove of a shredding-element partier, therein characterized, in that the sawtooth wire is converted into a shape, which essentially corresponds to that shape, which the sawtooth wire is to assume on the shredding-element carrier, and the preshaped sawtooth wire is to be subsequently hardened.
- 2. A process in accord with Claim 1, therein characterized, in that the sawtooth wire is preshaped on a preshaping body, the circumference of which is essentially that of the shredding-element carrier of the disintegrator roll.
- 3. A process in accord with Claim 2, therein characterized, in that the sawtooth wire, during the hardening procedure, remains on the preshaping body.
- 4. A process in accord with Claim 1, therein characterized, in that the sawtooth wire is shaped by being wound on the shredding-element carrier of the disintegrator roll, and is hardened while it remains on the said shredding-element carrier.
- 5. A process in accord with one or more of the Claims 1 to 4, therein characterized, in that the ends of the sawtooth wire which are to be found on the shredding-element carrier are subjected to a gain ling procedure.
- 6. A process in accord with one of more of the Claims 1 to 5, therein characterized, in that the shredding-element is hardened by induction.
- 7. A process in accord with Claim 6, therein characterized, in that the shreddingelement is hardened by means of a high frequency current.
- 8. A process in accord with Claim 7, therein characterized, in that the surface of the shredding element in the area of its teeth is hardened by induction with an



- A process in accord with one or more of the Claims 1 to 8, therein characterized, in that the shredding-element is hardened in a protective gas.
- 10. A process in accord with one or more of the Claims 1 to 9, therein characterized, in that the shredding-element is stress-relieved after the hardening by means of a heat treatment.
- 11. A process in accord with one or more of the Claims 1 to 19, therein characterized, in that the shredding-element is particle blasted after the hardening.
- 12. A process in accord with Claim 11, therein characterized, in that the shreddingelement is blasted with the and of glass pearls.
- 13. A process in accord with one or more of the Claims 1 to 12, therein characterized, in that the shredding-element is demagnetized.
- 14. A process in accord with one or more of the Claims 1 to 13, therein characterized, in that the shredding-element is chemically deburred.
- 15. A process in accord with one or more of the Claims 1 to 14, therein characterized, in that the shredding-element is coated.
- 16. A process in accord with Claim 15, therein characterized, in that the shreddingelement is coated by nickel-plating.
- 17. A process in accord with one or more of the Claims 1 to 16, therein characterized, in that the tooth points of the shredding-element are subjected to a grinding procedure.
- 18. A process in accord with Claim 17, therein characterized, in that the points of the teeth are subjected to grinding in a direction counter to their operational direction.



- 20. A process in accord with one or more of the Claims 1 to 19, therein characterized, in that the sawtooth wire, before it is brought into share, is a non-hardened wire.
- 21. A process in accord with one or more of the Claims 1 to 20, therein characterized, in that a non-hardening material is used for the shredding-element carrier.
- 22. A process in accord with Claim 21, therein characterized, in that, as a base material, a low carbon steel is employed.
- 23. A process in accord with one or more of the Claims 1 to 22, therein characterized, in that the start and/or the end of the sawtooth wire is welfeed to the shredding-element carrier.
- 24. A process in accord with one or more of the Claims 1 to 23, therein characterized, in that the sawtooth wire is plasma coated.
- 25. A process in accord with Claim 24, therein characterized, in that the coating is effected with titanium nitride.
- 26. A disintegrator roll for an open-end spinning apparatus, wherein the disintegrator roll has been manufactured by one or more of the Claims 1 to 18, with a shredding-element carrier, on which is mounted a sawtooth wire, therein characterized, in that the sawtooth wire (20) is a steel wire at least partially hardened following its shaping.
- A disintegrator roll in accord with Claim 26, therein characterized, in that the sawtooth wire (20) is a hardened steel wire after being affixed to the shredding-element carrier (10).

- 28. A disintegrator roll in accord with Claim 26 or 27, therein characterized, in that the shredding-element is constructed as an industive hardened sawtooth wire (20).
- 29. A disintegrator roll in accord with one or more of the Claims 26 to 28, therein characterized, in that the shredding-element carrier (10) is made of low carbon steel.
- 30. A disintegrator roll in accord with one or more of the Claims 26 to 29, therein characterized, in that the start and/or the end of the sawtooth wire (20) is welded to the shredding-element carrier (10).
- 31. A disintegrator roll in accord with one or more of the Claims 26 to 30, therein characterized, in that the say tooth wire (20) is plasma coated.
- 32. A disintegrator roll in accord with Claim 31, therein characterized, in that the sawtooth wire (20) is coated with titanium nitride. 33. A disintegrator roll in accord with one or more of the Claims 26 to 32, therein characterized, in that the sawtooth wire (20) in the foot-area of its teeth occupies a lateral groove.

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